FAIRFAX MATERIALS, INC.
14504 Greenview Dr., Suite 210, Laurel, MD 20708
P.O. Box 850, Laurel, MD 20725
410-792-7234 (Balt. Tel.) • 301-953-7650 (Wash. Tel.) • 301-470-4075 Fax

January 25, 2017

Mr. Lee Martin
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street, SE
Charleston, WV 25304

Re: Metso Portable Screen – Permit to Construct

Dear Mr. Martin:

Please find the enclosed application for a permit to construct for a Metso Lokotrack ST2.8 Mobile Scalping Screen. This screen is portable and we would like to transfer it periodically between three of our sites depending on material availability and need.

If you have any questions or require any additional information to complete your review please feel free to contact me by email at Collin@aggmgt.com or by phone at 410-792-7234.

Sincerely,

Collin Sumpter
Resource Manager

Fairfax Materials Inc
Ours Quarry
777-00143
640-0088
Lee

Fairfax Materials, Inc.
Metso Lokotrack ST2.8 Mobile Scalping Screen
January 23, 2017

Table of Contents

WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY
601 57th Street, SE
Charleston, WV 25304
Phone: (304) 926-0475 • www.dep.wv.gov/daq

APPLICATION FOR GENERAL PERMIT REGISTRATION

CONSTRUCT, MODIFY, RELOCATE OR ADMINISTRATIVELY UPDATE A STATIONARY SOURCE OF AIR POLLUTANTS

✓ CONSTRUCTION MODIFICATION 9 RELOCATION 9 CLASS I ADMINISTRATIVE UPDATE
9 CLASS II ADMINISTRATIVE UPDATE

CHECK WHICH TYPE OF GENERAL PERMIT REGISTRATION YOU ARE APPLYING FOR:

9 **G10-D** – Coal Preparation and Handling
9 **G20-B** – Hot Mix Asphalt
9 **G30-D** – Natural Gas Compressor Stations
9 **G33-A** – Spark Ignition Internal Combustion Engines
9 **G35-A** – Natural Gas Compressor Stations (Flare/Glycol Dehydration Unit)
✓ **G40-C** – Nonmetallic Minerals Processing
9 **G50-B** – Concrete Batch
9 **G60-C** - Class II Emergency Generator
9 **G65-C** – Class I Emergency Generator
9 **G70-A** – Class II Oil and Natural Gas Production Facility

SECTION I. GENERAL INFORMATION

1. Name of applicant (as registered with the WV Secretary of State's Office): Fairfax Materials, Inc.

2. Federal Employer ID No. **(FEIN):** 55-0167100

3. Applicant's mailing address: P.O. Box 850 Laurel, MD 20725

4. Applicant's physical address: 1996 Morgantown Rd. Petersburg, WV 26847

5. If applicant is a subsidiary corporation, please provide the name of parent corporation: Fairfax Holding Company

6. **WV BUSINESS REGISTRATION.** Is the applicant a resident of the State of West Virginia? ✓ **YES** 9 **NO**

✓ IF **YES,** provide a copy of the Certificate of **Incorporation/ Organization / Limited Partnership** (one page) including any name change amendments or other Business Registration Certificate as **Attachment A**.

– IF **NO,** provide a copy of the **Certificate of Authority / Authority of LLC / Registration** (one page) including any name change amendments or other Business Certificate as **Attachment A**.

SECTION II. FACILITY INFORMATION

7. Type of plant or facility (stationary source) to be constructed, modified, relocated or administratively updated (e.g., coal preparation plant, primary crusher, etc.): Portable screening plant.

8a. Standard Industrial Classification (SIC) code: 1422

AND

8b. North American Industry System (NAICS) code: 212312

9. DAQ Plant ID No. (for existing facilities only): N/A

10. List all current 45CSR13 and other General Permit numbers associated with this process (for existing facilities only): N/A

A: PRIMARY OPERATING SITE INFORMATION

11A. Facility name of primary operating site:	12A. Address of primary operating site:
Ours Quarry	Mailing: P.O. Box 850 Laurel, MD 20725 Physical: 1996 Morgantown Road Petersburg, WV 26847

13A. Does the applicant own, lease, have an option to buy, or otherwise have control of the proposed site? ✓ YES 9 NO

✓ IF **YES**, please explain: Owner of Property

– IF **NO**, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.

14A. For **Modifications or Administrative Updates** at an existing facility, please provide directions to the present location of the facility from the nearest state road;

– ✓ For Construction or Relocation permits, please provide directions to the proposed new site location from the nearest state road. Include a **MAP** as **Attachment F**.

On WV 5/7 (Morgantown Road), three miles East of Arthur, WV.

15A. Nearest city or town:	16A. County:	17A. UTM Coordinates:
Arthur, WV	Grant	Northing (KM): 4,329,107 Easting (KM): 668,170 Zone: 17

18A. Briefly describe the proposed new operation or change (s) to the facility:	19A. Latitude & Longitude Coordinates (NAD83, Decimal Degrees to 5 digits):
Construction of one "Metso Lokotrack ST2.8 Mobile Scalping Screen".	Latitude: 39.09489° N Longitude: -79.05537° W

B: 1ST ALTERNATE OPERATING SITE INFORMATION (only available for G20, G40, & G50 General Permits)

11B. Name of 1st alternate operating site:	12B. Address of 1st alternate operating site:
Scherr Quarry	Mailing: P.O. Box 850, Laurel, MD 20725 Physical: 704 Old Scherr Road New Creek, WV 26743

13B. Does the applicant own, lease, have an option to buy, or otherwise have control of the proposed site? ✓ YES 9 NO

– IF **YES**, please explain: __ Owner of Property

– IF **NO**, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.

14B. – For **Modifications or Administrative Updates** at an existing facility, please provide directions to the present location of the facility from the nearest state road;

– ✓ For Construction or Relocation permits, please provide directions to the proposed new site location from the nearest state road. Include a **MAP** as **Attachment F**.

Southeast on New Creek School Road 400 feet, turn right on WV-972. South 0.4 miles, continue on US-50 west 2.6 miles, slight left on WV-93 west 12.1 miles, turn left on Old Scherr Road 0.7 miles.

15B. Nearest city or town:	16B. County: Grant	17B. UTM Coordinates:
Scherr, WV		Northing (KM): 4,338,304 Easting (KM): 658,231 Zone: 17
18B. Briefly describe the proposed new operation or change (s) to the facility:		19B. Latitude & Longitude Coordinates (NAD83, Decimal Degrees to 5 digits):
Construction of one "Metso Lokotrack ST2.8 Mobile Scalping Screen".		Latitude: 39.17958° N Longitude: -79.16810° W

C: 2ND ALTERNATE OPERATING SITE INFORMATION (only available for G20, G40, & G50 General Permits):

11C. Name of 2nd alternate operating site:	12C. Address of 2nd alternate operating site:
Short Gap Quarry	Mailing: P.O. Box 850, Laurel, MD 20725 Physical:10676 Waxler Road Keyser, WV 26726

13C. Does the applicant own, lease, have an option to buy, or otherwise have control of the proposed site? ✓ **YES** 9 **NO**

– IF **YES**, please explain: _____ Owner of Property

– IF **NO**, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.

14C. – For **Modifications or Administrative Updates** at an existing facility, please provide directions to the present location of the facility from the nearest state road;

– ✓ For Construction or Relocation permits, please provide directions to the proposed new site location from the nearest state road. Include a **MAP** as **Attachment F**.

WV 46 0.2 miles to CR 8 Waxler Road for 11.6 miles, quarry entrance on right

15C. Nearest city or town:	16C. County: Mineral	17C. UTM Coordinates:
Keyser, WV		Northing (KM): 4,378,745 Easting (KM): 685,628 Zone: 17
18C. Briefly describe the proposed new operation or change (s) to the facility:		19C. Latitude & Longitude Coordinates (NAD83, Decimal Degrees to 5 digits):
Construction of one "Metso Lokotrack ST2.8 Mobile Scalping Screen".		Latitude: 39.53831° N Longitude: -78.83991° W

20. Provide the date of anticipated installation or change:	21. Date of anticipated Start-up if registration is granted:
03/01/2017	03/01/2017
☐ If this is an **After-The-Fact** permit application, provide the date upon which the proposed change did happen: :	
____/____/____	

22. Provide maximum projected **Operating Schedule** of activity/activities outlined in this application if other than 8760 hours/year. (Note: anything other than 24/7/52 may result in a restriction to the facility's operation).

Hours per day: 15.7 Days per week: 7 Weeks per year: 35 Hours per year: 3,840 Percentage of operation: 100%

SECTION III. ATTACHMENTS AND SUPPORTING DOCUMENTS

23. Include a check payable to WVDEP – Division of Air Quality with the appropriate **application fee** (per 45CSR22 and 45CSR13).

24. Include a **Table of Contents** as the first page of your application package.

All of the required forms and additional information can be found under the Permitting Section (General Permits) of DAQ's website, or requested by phone.

25. Please check all attachments included with this permit application. Please refer to the appropriate reference document for an explanation of the attachments listed below.

- ✓ ATTACHMENT A : CURRENT BUSINESS CERTIFICATE
- ✓ ATTACHMENT B: PROCESS DESCRIPTION
- ✓ ATTACHMENT C: DESCRIPTION OF FUGITIVE EMISSIONS
- ✓ ATTACHMENT D: PROCESS FLOW DIAGRAM
- ✓ ATTACHMENT E: PLOT PLAN
- ✓ ATTACHMENT F: AREA MAP
- ✓ ATTACHMENT G: EQUIPMENT DATA SHEETS AND REGISTRATION SECTION APPLICABILITY FORM
- ×ATTACHMENT H: AIR POLLUTION CONTROL DEVICE SHEETS - N/A
- ✓ ATTACHMENT I: EMISSIONS CALCULATIONS
- ✓ ATTACHMENT J: CLASS I LEGAL ADVERTISEMENT
- × ATTACHMENT K: ELECTRONIC SUBMITTAL - N/A
- ✓ ATTACHMENT L: GENERAL PERMIT REGISTRATION APPLICATION FEE
- × ATTACHMENT M: SITING CRITERIA WAIVER – N/A
- ✓ ATTACHMENT N: MATERIAL SAFETY DATA SHEETS (MSDS)
- ✓ ATTACHMENT O: EMISSIONS SUMMARY SHEETS
- × OTHER SUPPORTING DOCUMENTATION NOT DESCRIBED ABOVE (Equipment Drawings, Aggregation Discussion, etc.) – N/A

Please mail an original and two copies of the complete General Permit Registration Application with the signature(s) to the DAQ Permitting Section, at the address shown on the front page of this application. Please DO NOT fax permit applications. For questions regarding applications or West Virginia Air Pollution Rules and Regulations, please refer to the website shown on the front page of the application or call the phone number also provided on the front page of the application.

SECTION IV. CERTIFICATION OF INFORMATION

This General Permit Registration Application shall be signed below by a Responsible Official. A Responsible Official is a President, Vice President, Secretary, Treasurer, General Partner, General Manager, a member of a Board of Directors, or Owner, depending on business structure. A business may certify an Authorized Representative who shall have authority to bind the Corporation, Partnership, Limited Liability Company, Association, Joint Venture or Sole Proprietorship. Required records of daily throughput, hours of operation and maintenance, general correspondence, Emission Inventory, Certified Emission Statement, compliance certifications and all required notifications must be signed by a Responsible Official or an Authorized Representative. If a business wishes to certify an Authorized Representative, the official agreement below shall be checked off and the appropriate names and signatures entered. Any administratively incomplete or improperly signed or unsigned Registration Application will be returned to the applicant.

FOR A CORPORATION (domestic or foreign)

✓ I certify that I am a President, Vice President, Secretary, Treasurer or in charge of a principal business function of the corporation

FOR A PARTNERSHIP

G I certify that I am a General Partner

FOR A LIMITED LIABILITY COMPANY

G I certify that I am a General Partner or General Manager

FOR AN ASSOCIATION

G I certify that I am the President or a member of the Board of Directors

FOR A JOINT VENTURE

G I certify that I am the President, General Partner or General Manager

FOR A SOLE PROPRIETORSHIP

G I certify that I am the Owner and Proprietor

G *I hereby certify that* (please print or type) *Collin J. Sumpter*

is an Authorized Representative and in that capacity shall represent the interest of the business (e.g., Corporation, Partnership, Limited Liability Company, Association Joint Venture or Sole Proprietorship) and may obligate and legally bind the business. If the business changes its Authorized Representative, a Responsible Official shall notify the Director of the Office of Air Quality immediately, and/or,

I hereby certify that all information contained in this General Permit Registration Application and any supporting documents appended hereto is, to the best of my knowledge, true, accurate and complete, and that all reasonable efforts have been made to provide the most comprehensive information possible.

Signature _____ January 26, 2017
(please use blue ink) Responsible Official Date

Name & Title: Edward T. Barnhouser, President
(please print or type)

Signature _____ 01/26/17
(please use blue ink) Authorized Representative (if applicable) Date

Applicant's Name: Fairfax Materials, Inc.

Phone & Fax: 410-792-7234 (Phone) 301-470-4075 (Fax)

Email: Collin@aggmgt.com

State of West Virginia

Certificate

I, Ken Hechler, Secretary of State of the State of West Virginia, hereby certify that originals of the Articles of Amendment to the Articles of Incorporation of

FAIRFAX SAND AND CRUSHED STONE, INC.

are filed in my office, signed and verified. as required by the provisions of Chapter 31. Article 1. Section 31 of the West Virginia Code and conform to law. Therefore, I issue this

CERTIFICATE OF AMENDMENT TO THE ARTICLES OF INCORPORATION

changing the name of the corporation to

FAIRFAX MATERIALS, INC.

and I attach to this certificate a duplicate original of the Articles of Amendment.

Given under my hand and the Great Seal of the State of West Virginia on this Twenty-Second *day of* December *19* 99

Secretary of State

Attachment B

Fairfax Materials – Metso Portable Screen
Process Description
January 23, 2017

The Metso Lokotrack ST2.8 Portable Scalping Screen will be used to process +10" aggregate material into a maximum of three (3) different sized products depending on screen configuration. The screen is a stand-alone process which can be moved between sites depending on the amount/type of products required. There is a water truck at each site which will be used to ensure that the moisture content of the material is sufficient to control particulate emissions. The process is outlined below and further shown on "Attachment D – Process Flow Diagram".

1. Plus 10" aggregate material will be fed via an excavator or front end loader into a 5.9yd^3 dump hopper (1). Material then drops from the hopper into the feeder (2).

2. The feeder discharges to the 16'x5' D.D. screen at a maximum rate of 400 TPH (3).

3. The 16'x5' D.D. screen will deposit screened material onto one of three conveyors depending on size. The amount of material going to each conveyor will depend on the type of material being processed and the current screen configuration. The maximum to all 3 conveyors will be 400 TPH (4, 5 & 6).

4. After the material is discharged from the screen, Conveyors #1 (7), #2 (8) and #3 (9) transport the materials to the associated stockpiles.

Attachment C – Description of Fugitive Emissions

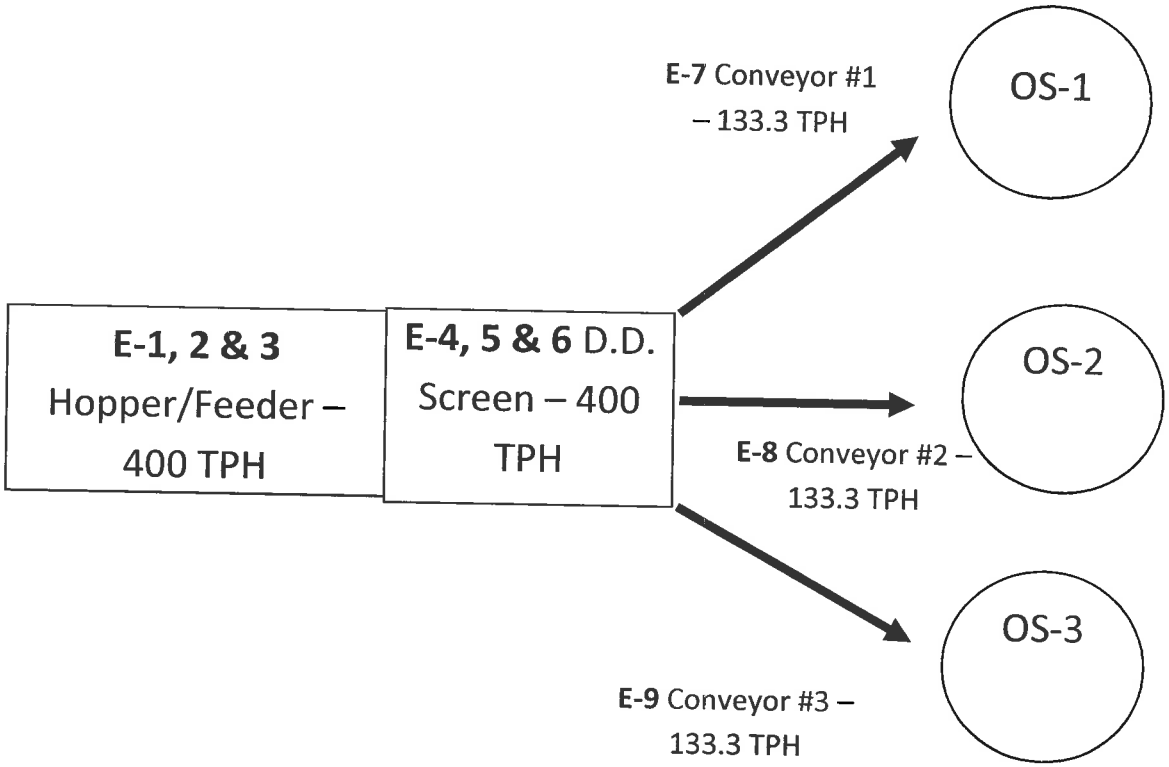
The sources of fugitive emissions are product stockpiles, haul roads and vehicle traffic. The fugitive emissions from road surfaces will be controlled by a water truck. The truck is fitted with pump and spray nozzles which can be used to saturate stockpiles.

The application rate can be varied by adjusting the nozzles; the required rate depends on weather conditions. Enough water is applied to control the dust but it is important not to apply excess water that would cause mud to be tracked.

The water conduits and spray nozzles will be drained each evening when there is a need due to freezing weather. Road surfaces are made of crushed stone. Another method to control road dust is to limit the speed of traffic.

Attachment D – Flow Diagram

Metso Lokotrack ST2.8 Mobile Scalping Screen



*Screen is portable and will be used at more than one site. Is independent from any other plant on site.

	-	He	09-Jan-2014	-
	-			-
DESCRIPTION OF CHANGE	LOC	BY	DATE	ECN

STANDARDS AND INSTRUCTIONS FOR MANUFACTURING

ALL DIMENSIONS IN MM

General tolerances according to document N11477752, Metso Mining and Construction
Welding specification according to document N11449040, Metso Mining and Construction
Surface finishing according to document N11447786, Metso Mining and Construction

2013

1ST ANGLE PROJECTION

ASSEMBLY AND DESCRIPTION

Document Group
MI

PRODUCT

DRAWING DESCRIPTION
TRANSPORT DRAWING
ST2.8

Page
1/1

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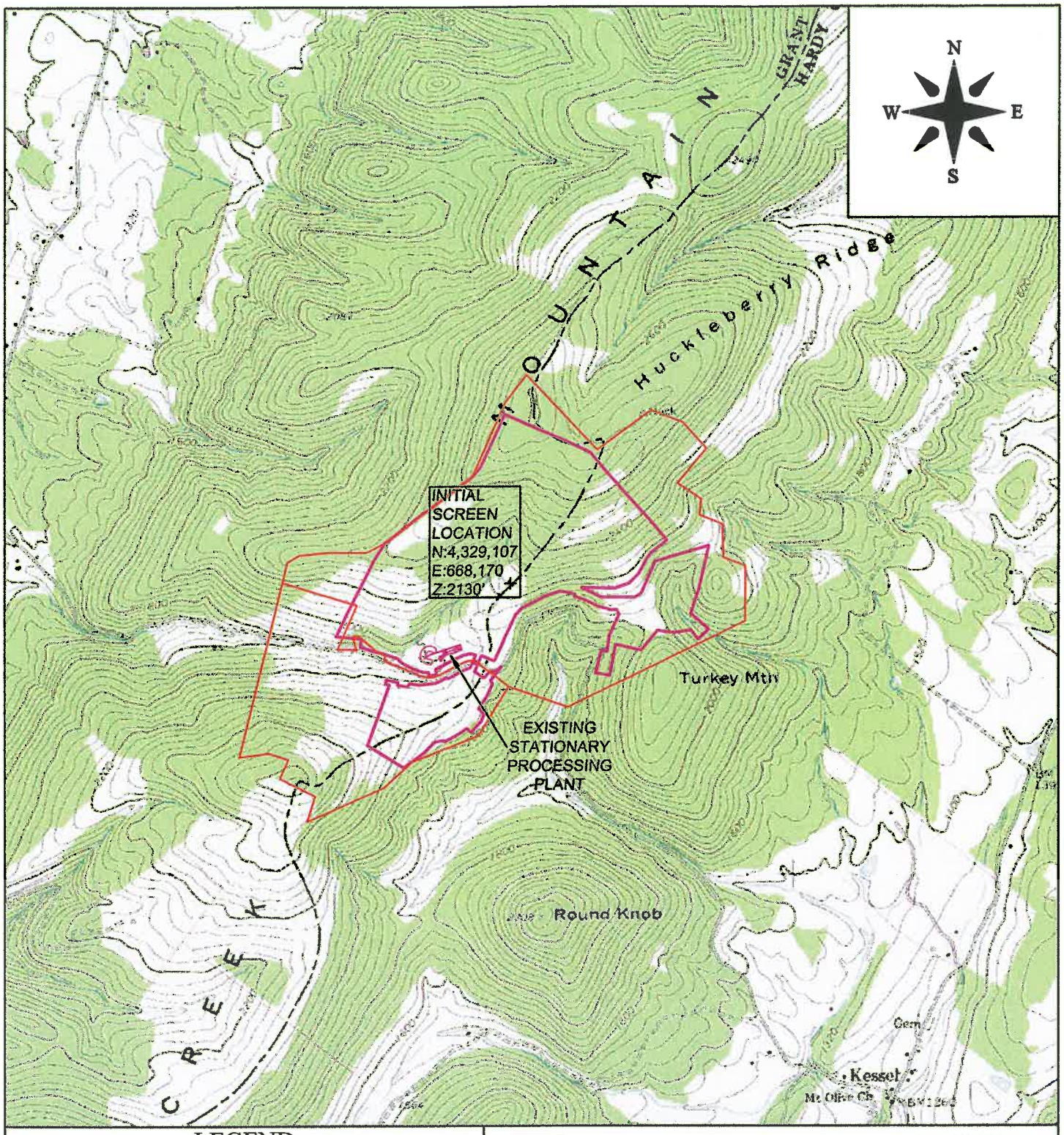
D.

metso

DWG SIZE	DRAWING NUMBER PREFIX	ITEM CODE	SUFFIX	REV
A2		MM1028894		0



LEGEND

PROPERTY LINE

MINING PERMIT

0 2000 4000 6000

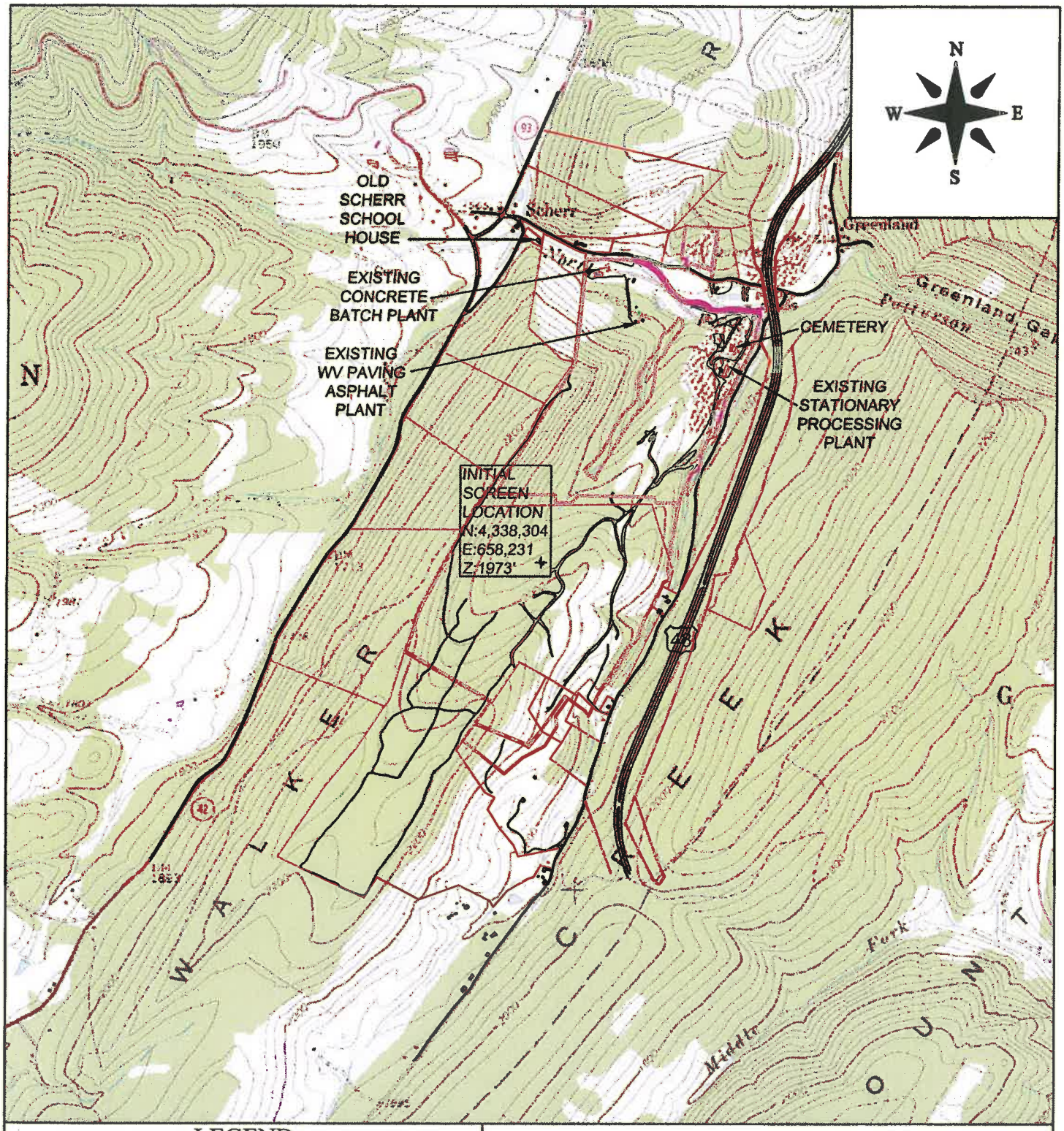
FAIRFAX MATERIALS, INC.
8490 Garrett Highway
Oakland, Maryland 21550
Phone: (888) 324-7001
Fax: (301) 334-5915
www.FairfaxMaterials.com

ATTACHMENT F - AREA MAP

OURS QUARRY

1996 Morgantown Road, Petersburg, WV 26847
Grant District, Grant County, WV
Southfork District, Hardy County, WV

Drawing: Ours AQ USGS Topo Map.dwg	Drawn By: WEL	Scale: 1" = 2000'	Date: 01/16/2017



LEGEND

PROPERTY LINE

MINING PERMIT

0 2000 4000 6000

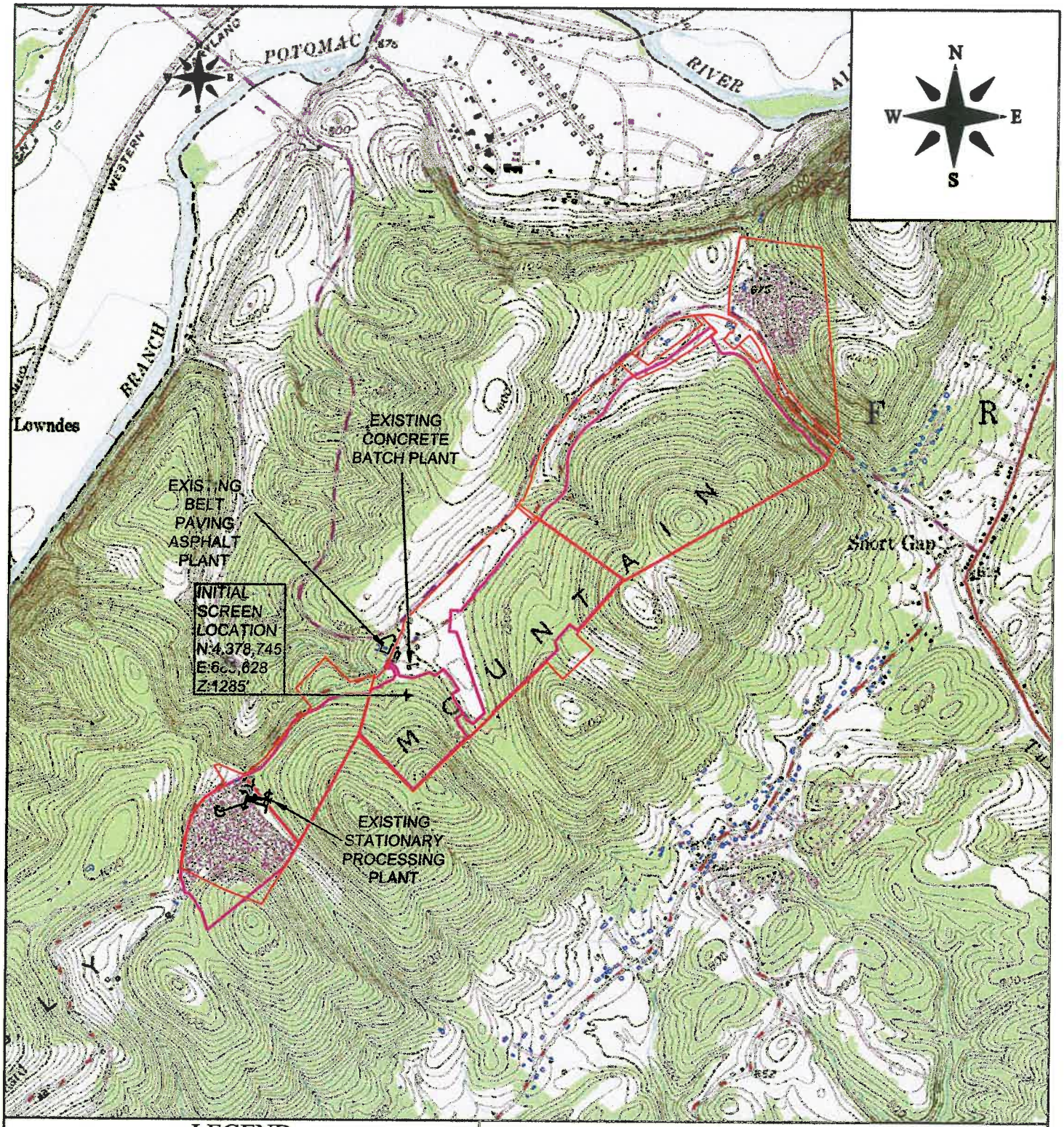
FAIRFAX MATERIALS, INC.
8490 Garrett Highway
Oakland, Maryland 21550
Phone: (888) 324-7001
Fax: (301) 334-5915
www.FairfaxMaterials.com

ATTACHMENT F - AREA MAP

SCHERR QUARRY

704 Old Scherr Road, New Creek, WV 26743
Union District, Grant County, WV

Drawing: Scherr AQ USGS Topo Map.dwg	Drawn By: WEL	Scale: 1" = 2000'	Date: 01/03/2017



LEGEND

PROPERTY LINE
PERMIT BOUNDARY

0 2000 4000 6000

FAIRFAX MATERIALS, INC.
8490 Garrett Highway
Oakland, Maryland 21550
Phone: (888) 324-7001
Fax: (301) 334-5915
www.FairfaxMaterials.com

ATTACHMENT F - AREA MAP

SHORT GAP QUARRY

10676 Waxler Road, Keyser, WV 26726
Frankfort District, Mineral County, WV

Drawing: Short Gap AQ USGS Topo Map.dwg	Drawn By: WEL	Scale: 1" = 2000'	Date: 01/16/2017

Attachment G – Equipment Data Sheets

General Permit G40-C Registration
Section Applicability Form

General Permit G40-C allows qualified registrants to seek registration for a variety of sources. These sources include nonmetallic mineral processing plants which include crushers, screens, transfer points (loading, unloading, etc.), open stockpiles, bins, haulroads, reciprocating internal combustion engine driven compressors, emergency standby generators, and tanks. All registered facilities will be subject to Sections 1.0, 1.1, 2.0, 3.0 and 4.0.

General Permit G40-C allows the registrant to choose which sections of the permit that they wish to seek registration under. Therefore, please mark which sections that you are applying for registration under. Please keep in mind, that if this registration is approved, the issued registration will state which sections will apply to your affected facility.

Section 5[1]	Nonmetallic Mineral Processing Operations	☒
Section 6	Standards of Performance for Nonmetallic Mineral Processing Plants that Commenced Construction, Reconstruction or Modification after August 31, 1983 but before April 22, 2008 (40CFR60 Subpart OOO)	☐
Section 7	Standards of Performance for Nonmetallic Mineral Processing Plants that Commenced Construction, Reconstruction or Modification on or after April 22, 2008. (40CFR60 Subpart OOO)	☒
Section 8[2]	Reciprocating Internal Combustion Engines (R.I.C.E.)	☐
Section 9	Tanks	☐
Section 10	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40CFR60 Subpart IIII)	☐
Section 11	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (40CFR60 Subpart JJJJ)	☐

1 Affected facilities that are subject to Section 5 may also be subject to Sections 6 and 7. Therefore, if the applicant is seeking registration under multiple sections, they will need to select all applicable sections.

2 Affected facilities that are subject to Section 8 may also be subject to Sections 10 or 11. Therefore, if the applicant is seeking registration under multiple sections, they will need to select all applicable sections.

CRUSHING AND SCREENING AFFECTED SOURCE SHEET

Source Identification Number[1]		S-1 (4,5,6)					
Type of Crusher or Screen[2]		DD					
Make, Model No., Serial No.[3]		Metso 16'x5'					
Date of Construction, Reconstruction, or Modification (Month/Year)[4]		03/2017					
Maximum Throughput[5]	tons/hour	400					
	tons/year	1,536,000					
Material sized from/to:[6]		Varies					
Average Moisture Content (%)[7]		4%					
Control Device ID Number[8]		CS-PW					
Baghouse Stack Parameters[9]	height (ft)	N/A					
	diameter (ft)						
	volume (ACFM)						
	exit temp (°F)						
	UTM Coordinates						
Maximum Operating Schedule[10]	hours/day	15.7					
	days/year	245					
	hours/year	3,840					

1. Enter the appropriate Source Identification Number for each crusher and screen. For example, in the case of an operation which incorporates multiple crushers, the crushers should be designated CR-1, CR-2, CR-3 etc. beginning with the breaker or primary crusher. Multiple screens should be designated S-1, S-2, S-3 etc.
2. Describe types of crushers and screens using the following codes:

HM	Hammermill	SS	Stationary Screen	DR	Double Roll Crusher
SD	Single Deck Screen	BM	Ball Mill	DD	Double-Deck Screen
RB	Rotary Breaker	TD	Triple Deck Screen	JC	Jaw Crusher
GC	Gyratory Crusher	OT	Other		

3. Enter the make, model number, and serial number of the crusher/screen.
4. Enter the date that each crusher and screen was constructed, reconstructed, or modified.
5. Enter the maximum throughput for each crusher and screen in tons per hour and tons per year.
6. Describe the nominal material size reduction (e.g. +2"/ -⅜").
7. Enter the average percent moisture content of the material processed.
8. Enter the appropriate Control Device Identification Number for each crusher and screen. Refer to Table A - *Control Device Listing* and *Control Device Identification Number Instructions* in the *Reference Document* for Control Device ID prefixes and numbering.
9. Enter the appropriate stack parameters if a baghouse control device is used.
10. Enter the maximum operating schedule for each crusher and screen in hours per day, days per year and hours per year.

CONVEYING AFFECTED SOURCE SHEET

Source Identification Number[1]	Date of Construction, Reconstruction, or Modification (Month/Year)[2]	Type of Material Handled[3]	Size of Material Handled[4]	Maximum Material Transfer Rate[5]		Average Moisture Content (%)[6]	Control Device[7]
				tons/hour	tons/year		
OT-1 (1)	03/2017	RM	Varies	400	1,536,000	4%	UD-PW
OT-2 (2)	03/2017	RM	Varies	400	1,536,000	4%	UD-PW
OT-3 (3)	03/2017	RM	Varies	400	1,536,000	4%	TC-WS
BC-1 (7)	03/2017	SM	Varies	133.3	512,000	4%	TC-WS
BC-2 (8)	03/2017	SM	Varies	133.3	512,000	4%	TC-WS
BC-3 (9)	03/2017	SM	Varies	133.3	512,000	4%	TC-WS

1. Enter the appropriate Source Identification Number for each conveyor using the following codes. For example, multiple belt conveyors should be designated BC-1, BC-2, BC-3 etc. Transfer points are considered emission points, not sources, and should not be included in the *Conveying Affected Source Sheet*. Transfer Point Identification Numbers shall be assigned in the *Emission Calculation Sheet*.

BC	Belt Conveyor	BE	Bucket Elevator	DL	Drag-link Conveyor
PS	Pneumatic System	SC	Screw Conveyor	VC	Vibrating Conveyor
OT	Other				

2. Enter the date that each crusher and screen was constructed, reconstructed, or modified.
3. Enter the type of material being handled - Raw Material (RM) Sized Material (SM) Refuse (R) Other (O)
4. Enter the nominal size of the material being conveyed (e.g. sized material- ¾" x 0). If more than one material is handled by the listed conveyor, list each material and enter the appropriate data for each material.
5. Enter the maximum material transfer rate for each conveyor in tons per hour and tons per year.
6. Enter the average percent moisture content of the conveyed material.
7. Enter the control device for the conveyor. PE - Partial Enclosure (example 3/4 hoop), FE - Full Enclosure, N – None

STORAGE ACTIVITY AFFECTED SOURCE SHEET

Source Identification Number[1]	OS-1	OS-2	OS-3			
Type of Material Stored[2]	SA	SA	SA			
Average Moisture Content (%)[3]	4	4	4			
Maximum Yearly Storage Throughput (tons)[4]	512,000*	512,000*	512,000*			
Maximum Storage Capacity (tons)[5]	100	100	100			
Maximum Base Area (ft^2)[6]	314	314	314			
Maximum Pile Height (ft)[7]	12	12	12			
Method of Material Load-in[8]	MC	MC	MC			
Load-in Control Device Identification Number[9]	TC-WS	TC-WS	TC-WS			
Storage Control Device Identification Number[9]	SW-WS	SW-WS	SW-WS			
Method of Material Load-out[8]	FE	FE	FE			
Load-out Control Device Identification Number[9]	SW-WS	SW-WS	SW-WS			

***This number is arbitrary and depends on sales of each product**

1. Enter the appropriate Source Identification Number for each storage activity using the following codes. For example, if the facility utilizes three storage bins, four open stockpiles and one storage building (full enclosure), the Source Identification Numbers should be BS-1, BS-2, and BS-3; OS-1, OS-2, OS-3, and OS-4; and SB-1, respectively.

BS	Bin or Storage Silo (full enclosure)	E3	Enclosure (three sided enclosure)
OS	Open Stockpile	SB	Storage Building (full enclosure)
SF	Stockpiles with wind fences	OT	Other

2. Describe the type of material stored or stockpiled. (e.g. sized material, raw material, refuse, etc).
3. Enter the average percent moisture content of the stored material.
4. Enter the maximum yearly storage throughput for each storage activity.
5. Enter the maximum storage capacity for each storage activity in tons (e.g. silo capacity, maximum stockpile size, etc.)
6. For stockpiles, enter the maximum stockpile base area.
7. For stockpiles, enter the maximum stockpile height.
8. Enter the method of load-in or load-out to/from stockpiles or bins using the following codes:

CS	Clamshell	SS	Stationary Conveyor/Stacker
FC	Fixed Height Chute from Bins	ST	Stacking Tube
FE	Front Endloader	TC	Telescoping Chute from Bins
MC	Mobile Conveyor/Stacker	TD	Truck Dump
UC	Under-pile or Under-Bin Reclaim Conveyor	PC	Pneumatic Conveyor/Stacker
RC	Rake or Bucket Reclaim Conveyor	OT	Other

9. Enter the appropriate Control Device Identification Number for each storage activity. Refer to Table A - *Control Device Listing* and *Control Device Identification Number Instructions* in the *Reference Document* for Control Device ID prefixes and numbering.

HAULROAD EMISSIONS

Include G40-C Emission Calculation Spreadsheet indicating haulroad emissions, or submit calculations indicating assumptions made to substantiate emission values.

Emission Source	Uncontrolled Emissions		Controlled Emissions	
	Hourly (lb/hr)	Annual (tpy)	Hourly (lb/hr)	Annual (tpy)
Haul Trucks	13.84	26.56	4.15	7.97
Front End Loaders	4.05	7.78	1.22	2.33

EMISSIONS SUMMARY

Name of applicant: Fairfax Materials, Inc.
Name of plant: Metso Mobile Screen

Particulate Matter or PM (for 45CSR14 Major Source Determination)

	Uncontrolled PM		Controlled PM	
	lb/hr	TPY	lb/hr	TPY
FUGITIVE EMISSIONS				
Stockpile Emissions	0.00	0.02	0.00	0.01
Unpaved Haulroad Emissions	17.89	34.34	5.37	10.30
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
Fugitive Emissions Total	**17.89**	**34.36**	**5.37**	**10.31**
POINT SOURCE EMISSIONS				
Equipment Emissions	10.00	19.20	2.00	3.84
Transfer Point Emissions	2.78	5.34	0.61	1.17
Point Source Emissions Total*	**12.78**	**24.54**	**2.61**	**5.01**
Facility Emissions Total	**30.67**	**58.90**	**7.98**	**15.32**

*Note: Point Source Total Controlled PM TPY emissions is used for 45CSR14 Major Source determination (see below)

***Facility Potential to Emit (PTE) (Baseline Emissions) = 5.01**

(Based on Point Source Total controlled PM TPY emissions from above) **ENTER ON LINE 26 OF APPLICATION**

Particulate Matter under 10 microns, or PM-10 (for 45CSR30 Major Source Determination)

	Uncontrolled PM-10		Controlled PM-10	
	lb/hr	TPY	lb/hr	TPY
FUGITIVE EMISSIONS				
Stockpile Emissions	0.00	0.01	0.00	0.00
Unpaved Haulroad Emissions	5.28	10.14	1.58	3.04
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
Fugitive Emissions Total	**5.28**	**10.15**	**1.58**	**3.04**
POINT SOURCE EMISSIONS				
Equipment Emissions	3.48	6.68	0.70	1.34
Transfer Point Emissions	1.31	2.52	0.29	0.56
Point Source Emissions Total*	**4.79**	**9.21**	**0.99**	**1.89**
Facility Emissions Total	**10.08**	**19.35**	**2.57**	**4.94**

*Note: Point Source Total Controlled PM-10 TPY emissions is used for 45CSR30 Major Source determination

INPUTS

Include all information for each emission source and transfer point as listed in the permit application.

Name of applicant: **Fairfax Materials, Inc.**
Name of plant: **Metso Mobile Screen**

1. CRUSHING AND SCREENING *(including all primary and secondary crushers and screens)*

1a. PRIMARY CRUSHING

Primary Crusher ID Number	Description	Maximum Material Processing Capacity TPH	Maximum Material Processing Capacity TPY	Control Device ID Number	Control Efficiency %

1b. SECONDARY AND TERTIARY CRUSHING

Secondary & Tertiary Crusher ID	Description	Maximum Material Processing Capacity TPH	Maximum Material Processing Capacity TPY	Control Device ID Number	Control Efficiency %

1c. SCREENING

Secondary & Tertiary Crusher ID	Description	Maximum Material Processing Capacity TPH	Maximum Material Processing Capacity TPY	Control Device ID Number	Control Efficiency %
S-1	5' x 16' Metso D.D. Screen (3)	400	1,536,000	CS-PW1	80

2. *TRANSFER POINTS (including all conveyor transfer points, equipment transfer points etc.)*

		PM	PM-10
k =	Particle Size Multiplier (dimensionless)	0.74	0.35
U =	Mean Wind Speed (mph)	7	

Transfer Point ID No.	Transfer Point Description Include ID Numbers of all conveyors, crushers, screens, stockpiles, etc. involved	Material Moisture Content %	Maximum Transfer Rate TPH	Maximum Transfer Rate TPY	Control Device ID Number	Control Efficiency %
1	Dump Hopper (1)	4	400	1,536,000	UD-PW1	85
2	Hopper(1) - Feeder (2)	4	400	1,536,000	UD-PW1	85
3	Feeder (2) - Screen (3)	4	400	1,536,000	TC-WS1	70
4	Screen (3) - Conveyor (4)	4	133	511,872	CS-PW1	80
5	Screen (3) - Conveyor (5)	4	133	511,872	CS-PW1	80
6	Screen (3) - Conveyor (6)	4	133	511,872	CS-PW1	80
7	Conveyor (4) - Stockpile (7)	4	133	511,872	TC-WS1	70
8	Conveyor (5) - Stockpile (8)	4	133	511,872	TC-WS1	70
9	Conveyor (6) - Stockpile (9)	4	133	511,872	TC-WS1	70

3. WIND EROSION OF STOCKPILES *(including all stockpiles of raw coal, clean coal, coal refuse, etc.)*

p =	number of days per year with precipitation >0.01 inch	157
f =	percentage of time that the unobstructed wind speed exceeds 12 mph at the mean pile height	20

Source ID No.	Stockpile Description	Silt Content of Material %	Stockpile base area Max. sqft	Control Device ID Number	Control Efficiency %
OS-1	Varies	4	314	HR-WS1	70
OS-2	Vaires	4	314	HR-WS1	70
OS-3	Varies	4	314	HR-WS1	70

4. UNPAVED HAULROADS *(including all equipment traffic involved in process, haul trucks, endloaders, etc.)*

s =	silt content of road surface material (%)	10
p =	number of days per year with precipitation >0.01 inch	157
M_{dry} =	surface material moisture content (%) - dry conditions	0.2

Item Number	Description	Number of wheels	Mean Vehicle Weight(tons)	Mean Vehicle Speed (mph)	Miles per Trip	Maximum Trips Per Hour	Maximum Trips Per Year	Control Device ID Number	Control Efficiency %
1	40 Ton Dump Truck	10	40	5	0.05	20	76,800	HR-WS1	70
2	Front-End Loader	4	20	5	0.01	40	######	HR-WS1	70
3									
4									
5									
6									
7									
8									

5. INDUSTRIAL PAVED HAULROADS *(including all equipment traffic involved in process, haul trucks, endloaders, etc.)*

sL =	road surface silt loading, (g/ft^2)	70
P =	number of days per year with precipitation >0.01 inch	157

Item Number	Description	Mean Vehicle Weight (tons)	Miles per Trip	Maximum Trips Per Hour	Maximum Trips Per Year	Control Device ID Number	Control Efficiency %
1							
2							
3							
4							
5							
6							
7							
8							

1. Emissions From CRUSHING AND SCREENING

1a. Primary Crushing

Primary Crusher ID Number	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

1b. Secondary and Tertiary Crushing

Secondary & Tertiary Crusher ID	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

1c. Screening

Screen ID Number	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
S-1	10.000	19.200	2.000	3.840	3.480	6.682	0.696	1.336
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL	10.000	19.200	2.000	3.840	3.480	6.682	0.696	1.336

Crushing and Screening	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
TOTAL	10.000	19.200	2.000	3.840	3.480	6.682	0.696	1.336

1. *Emissions From CRUSHING AND SCREENING (Continued)*

EMISSION FACTORS

source: AP42, Fifth Edition, Revised 08/2004

(lb/ton of material throughput)

PM	
Primary Crushing	0.002
Tertiary Crushing	0.0054
Screening	0.025

PM-10	
Primary Crushing	0.001
Tertiary Crushing	0.0024
Screening	0.0087

2. *Emissions From TRANSFER POINTS*

Transfer Point ID No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
1	0.556	1.067	0.083	0.160	0.263	0.505	0.039	0.076
2	0.556	1.067	0.083	0.160	0.263	0.505	0.039	0.076
3	0.556	1.067	0.167	0.320	0.263	0.505	0.079	0.151
4	0.185	0.356	0.037	0.071	0.088	0.168	0.018	0.034
5	0.185	0.356	0.037	0.071	0.088	0.168	0.018	0.034
6	0.185	0.356	0.037	0.071	0.088	0.168	0.018	0.034
7	0.185	0.356	0.056	0.107	0.088	0.168	0.026	0.050
8	0.185	0.356	0.056	0.107	0.088	0.168	0.026	0.050
9	0.185	0.356	0.056	0.107	0.088	0.168	0.026	0.050
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

2. *Emissions From TRANSFER POINTS (continued)*

Transfer Point ID No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTALS	2.779	5.336	0.611	1.174	1.314	2.524	0.289	0.555

Source:
AP42, Fifth Edition, Revised 11/2006
13.2.4 Aggregate Handling and Storage Piles

Emissions From Batch Drop

E = k*(0.0032) * [(U/5)^1.3]/[(M/2)^1.4] = pounds/ton

Where:

		PM	PM-10
k =	Particle Size Multiplier (dimensionless)	0.74	0.35
U =	Mean Wind Speed (mph)		
M =	Material Moisture Content (%)		

Assumptions:

k - Particle size multiplier
For PM (< or equal to 30um) k = 0.74
For PM-10 (< or equal to 10um) k = 0.35

Emission Factor
For PM E= $I$88*(0.0032)*((((Inputs!$I$72)/5)^1.3)/(((Inputs!G78+0.000000001)/2)^1.4
=lb/ton

For PM-10 E= $J$88*(0.0032)*((((Inputs!$I$72)/5)^1.3)/(((Inputs!G78+0.000000001)/2)^1.4
=lb/ton

For lb/hr [lb/ton]*[ton/hr] = [lb/hr]

For Tons/year [lb/ton]*[ton/yr]*[ton/2000lb] = [ton/yr]

3. Emissions From WIND EROSION OF STOCKPILES

Stockpile ID No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
OS-1	0.002	0.007	0.000	0.002	0.001	0.003	0.000	0.001
OS-2	0.002	0.007	0.000	0.002	0.001	0.003	0.000	0.001
OS-3	0.002	0.007	0.000	0.002	0.001	0.003	0.000	0.001
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTALS	0.005	0.021	0.001	0.006	0.002	0.010	0.001	0.003

Source:
Air Pollution Engineering Manual

Storage Pile Wind Erosion (Active Storage)

E = 1.7*[s/1.5]*[(365-p)/235]*[f/15] = (lb/day/acre)

Where:

s =	silt content of material
p =	number of days with >0.01 inch of precipitation per year
f =	percentage of time that the unobstructed wind speed
	exceeds 12 mph at the mean pile height

Emission Factors

For PM E=(1.7)*((Inputs!F147)/1.5)*((365-Inputs!I139)/235)*((Inputs!I140)/15)

For PM-10 E=0.47*(1.7)*((Inputs!F147)/1.5)*((365-Inputs!I139)/235)*((Inputs!I140)/15)

For lb/hr [lb/day/acre]*[day/24hr]*[base area of pile (acres)] = lb/hr

For Ton/yr [lb/day/acre]*[365day/yr]*[Ton/2000lb]*[base area of pile (acres)] = Ton/yr

4. Emissions From UNPAVED HAULROADS

Item No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
1	13.84	26.56	4.15	7.97	4.08	7.84	1.23	2.35
2	4.05	7.78	1.22	2.33	1.20	2.30	0.36	0.69
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	17.89	34.34	5.37	10.30	5.28	10.14	1.58	3.04

Source:
AP42, Fifth Edition, Revised 11/2006
13.2.2 Unpaved Roads

Emission Estimate For Unpaved Haulroads at Industrial Sites (equation 1)

E= k*((s/12)^a)*((W/3)^b) =lb/vmt

Where:

		PM	PM-10
k =	particle size multiplier	4.90	1.50
a =	empirical constant	0.7	0.9
b =	empirical constant	0.45	0.45

Emission Factors

For PM E= (($I$35)*(((Inputs!$I$163)/12)^($I$36))*(((Inputs!H171)/3)^$I$37))

For PM-10 E= (($J$35)*(((Inputs!$I$163)/12)^($J$36))*(((Inputs!H171)/3)^$J$37))

For lb/hr (lb/vmt)*(miles per trip)*(Max trips per hour)

For Ton/yr (lb/vmt)*(miles per trip)*(Max trips per year)*(1/2000)

5. Emissions From INDUSTRIAL PAVED HAULROADS

Item No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Source:
AP42, Fifth Edition, Revised 11/2006
13.2.1 PAVED ROADS

Emission Estimate For Paved Haulroads

E = [k * (sL/2)^0.65 * (W/3)^1.5 - C] * (1 - (P/4*N) = lb / Vehicle Mile Traveled (VMT)

Where:

		PM	PM-10
k =	particle size multiplier	0.082	0.016
sL =	road surface silt loading, (g/ft^2)	70	
P =	number of days per year with precipitation >0.01 inch	157	
N =	number of days in averaging period	365	
C=	factor for exhaust, brake wear and tire wear	0.00047	0.00047

Emission Factors

For PM E= ($I$34*((($I$35)/2)^0.65)*(((Inputs!G190)/3)^1.5)-($I$38))*(1-((Inputs!I

For PM-10 E= ($J$34)*((($I$35)/2)^0.65)*(((Inputs!G190)/3)^1.5))-($I$38))*(1-((Inputs!$

For lb/hr (lb/vmt)*(miles per trip)*(Max trips per hour)

For Ton/yr (lb/vmt)*(miles per trip)*(Max trips per year)*(1/2000)

Attachment J – Class I Legal Advertisement

AIR QUALITY PERMIT NOTICE
Notice of Application

Notice is given that Fairfax Materials, Inc. has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a Construction Permit for a Nonmetallic Minerals Processing Facility located on WV Route 5/7, near Arthur, WV, in Grant County, West Virginia. The latitude and longitude coordinates are: 39.09489° N -79.05537° W

The applicant estimates the potential to discharge the following Regulated Air Pollutants will be: 15.32 TPY of PM and 4.94 TPY of PM_{10}.

Startup of operation is planned to begin on or about the 1st day of March, 2017. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1227, during normal business hours.
Dated this the (Day) day of (Month), (Year).

By: Fairfax Materials, Inc.
Collin J. Sumpter
Resource Manager
P.O. Box 850
Laurel, MD 20725

Attachment J – Class I Legal Advertisement

AIR QUALITY PERMIT NOTICE
Notice of Application

Notice is given that **Fairfax Materials, Inc.** has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a **Construction Permit** for a **Nonmetallic Minerals Processing Facility** located on **Old Scherr Road**, **near New Creek, WV**, in **Grant** County, West Virginia. The latitude and longitude coordinates are: **39.17958° N -79.16810° W**

The applicant estimates the potential to discharge the following Regulated Air Pollutants will be: **15.32 TPY of PM and 4.94 TPY of PM_{10}**.

Startup of operation is planned to begin on or about the **1st** day of **March**, **2017**. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1227, during normal business hours.
Dated this the **(Day)** day of **(Month)**, **(Year)**.

By: **Fairfax Materials, Inc.**
Collin J. Sumpter
Resource Manager
P.O. Box 850
Laurel, MD 20725

Attachment J – Class I Legal Advertisement

AIR QUALITY PERMIT NOTICE
Notice of Application

Notice is given that **Fairfax Materials, Inc.** has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a **Construction Permit** for a **Nonmetallic Minerals Processing Facility** located on **Waxler Road**, **near Keyser, WV**, in **Mineral** County, West Virginia. The latitude and longitude coordinates are: **39.53831° N -78.83991° W**

The applicant estimates the potential to discharge the following Regulated Air Pollutants will be: **15.32 TPY of PM and 4.94 TPY of PM_{10}**.

Startup of operation is planned to begin on or about the **1st** day of **March**, **2017**. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1227, during normal business hours.
Dated this the **(Day)** day of **(Month)**, **(Year)**.

By: **Fairfax Materials, Inc.**
Collin J. Sumpter
Resource Manager
P.O. Box 850
Laurel, MD 20725

SAFETY DATA SHEET (SDS) FOR LIMESTONE

SECTION I – PRODUCT & COMPANY IDENTIFICATION	
Manufacturer:	S. W. Barrick & Sons 14504 Greenview Drive, Suite 210 Laurel, Maryland 20708 Information Telephone Number: 301-953-7650 Emergency Telephone Number: 301-953-7650
Product Chemical Name:	Crushed Stone (Limestone)
Product Identification/Synonyms:	Crushed Stone, Aggregate, Manufactured Sand

SECTION II – HAZARD IDENTIFICATION	
Primary Routes of Entry:	Skin contact, eyes, Acute and Chronic inhalation, and ingestion.
Hazard Pictogram:	
Signal word:	Danger
Acute Exposure effects to Product Skin	Exposure to dust may cause dry and irritate the skin.
Eyes	Exposure may cause eye irritation.
Inhalation	Inhalation can irritate nose, throat, and lungs, causing coughing, sneezing, and shortness of breath.
Ingestion	Do not ingest aggregates. Ingestion of small quantities is not expected to be harmful. If ingested in large quantities, it may cause intestinal distress.

SECTION III – PRODUCT AND COMPONENT DATA				
Ingredient Name	CAS Registry Number	Approximate Percentage	Exposure Limits ACGIH TLV (mg/m^3)	Exposure Limits OSHA PEL(mg/m^3)
Limestone	1317-65-3	100	10 (nuisance dust)	15 total (dust)
Quartz (Crystalline Silica)	14808-60-7	>1	.01 (respirable dust)	.01 (respirable dust)

SECTION IV – FIRST AID MEASURES	
Skin Contact	Rinse the exposed area with cool water. Wash exposed area with mild liquid soap. Seek medical attention for a rash or continued irritation.
Eye Contact	Irrigate exposed eye(s) with clean water or saline solution for at least 15 minutes while holding the eye lid(s) open. Seek medical attention for abrasions, embedded particles, or persistent irritation.
Ingestion	If the victim is conscious, provide clean water to rinse the mouth. Provide large quantities water for the victim to drink. Seek medical attention immediately.
Inhalation	Immediately move the person to fresh air. Dust should be cleared from the throat and nasal passages. Seek medical attention if irritation persists. Monitor vital signs and administer CPR if necessary.

SECTION V – FIRE AND EXPLOSION HAZARD DATA			
Flash Point and Method	Non-combustible	Extinguishing Media	Use extinguishing media for surrounding fire conditions
Combustion Products	Decomposes at 825° C	General Hazard	Avoid breathing dust
Fire Fighting Procedures: Limestone poses no fire related hazard. Use appropriate personal protective clothing and equipment for surrounding fire conditions.			

SECTION VI – ACCIDENTAL RELEASE MEASURES

Place in stable containers for disposal. Avoid procedures that generate dust. If dust is generated wear appropriate protective equipment as described in section VIII

SECTION VII – STORAGE AND HANDLING PRECAUTIONS

Reparable crystalline silica-containing dust may be generated during the processing, handling and storage. The personal protective measures in Section VIII of this SDS should be followed. Use methods that will minimize dust generation.

Do not stand on stockpiles of this material, as it may be unstable.

This product is not intended for abrasive blasting use.

Do not store near food or beverage.

SECTION VIII – PERSONAL PROTECTIVE EQUIPMENT AND CONTROL MEASURES

Engineering Controls: Use exhaust, ventilation, or other effective suppression measures to maintain dust exposure levels below the established exposure limits.

Respiratory Protection: Respiratory protection is typically not required under normal conditions. If dust concentrations exceed OSHA/MSHA Personal Exposure Limits, wear appropriate NIOSH/MSHA-approved respiratory protection. Respirators should be properly fitted for maximum effectiveness.

Skin Protection: Long cuffless pants, long sleeve shirts, gauntlet-type gloves and appropriate boots should be used to prevent exposure. Dust exposed personal protective equipment should be cleaned after each use and exposed clothing should be laundered after each use.

Eye Protection: Safety glasses with side shields that comply with ANSI Standard Z87.1 should be worn as minimal protection when eye exposure to airborne particles exists. Dust goggles should be worn when excessive dust conditions exist or are anticipated.

SECTION IX – PHYSICAL and CHEMICAL PROPERTIES				
Boiling Point	N/A		Vapor Pressure (mm Hg)	N/A
Specific Gravity (H_20=1)	2.6 – 2.8		Appearance and Odor	Angular to round, gray
Vapor Density (Air=1)	N/A		Freezing Point	None, Solid
Solubility in Water	Insoluble		Evaporation Rate	N/A
Physical State	Solid		Odor	None
PH in Water	Neutral		Viscosity	None, Solid

SECTION X – **STABILITY and REACTIVITY**	
Stability	Product is Stable
Incompatibility	Aggregate dissolves in hydrofluoric acid, and may produce corrosive silicon tetrafluoride gas. Silicates react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride.
Hazardous Decomposition	Carbon Dioxide
Hazardous Polymerization	None

SECTION XI – TOXICOLOGICAL INFORMATION

Effects of Chronic Exposure

Proper use of Limestone Aggregates for construction purposes is not believed to cause acute toxic effects. This product contains crystalline silica, which has been classified as a human carcinogen by IRAC and NPT.

Repeated overexposures to high levels of respirable crystalline silica (cristobalite, quartz, and tridymite) can cause silicosis, serious and fatal lung disease, scleroderma (thickening of skin, systemic lupus erythematosus, rheumatoid arthritis) and disease affecting the kidneys.

SECTION XII – ECOLOGICAL INFORMATION

Ecotoxicity: Because of the elevated pH of this product, it might be expected to produce some ecotoxicity upon exposure to certain aquatic organisms and aquatic systems in high concentrations.

Environmental Fate: This material shows no bioaccumulation effect or food chain concentration toxicity.

SECTION XIII – SPILL AND DISPOSAL PRACTICES

The cleanup of spilled material may cause dusty conditions.

The personal protective measures in Section VIII of this SDS should be followed.

Wetting material will minimize dust generation. Materials should be disposed of according to all applicable federal, state, and local laws and regulations.

SECTION XIV – TRANSPORTATION

DOT Classification – None Placard Requirement: None

SECTION XV – REGULATORY INFORMATION

Limestone is not classified as a hazardous material by US DOT and is not regulated by the Transportation of Dangerous Goods (TDG) when shipped by any mode of transport.

SECTION XVI – DATE OF PREPARATION and DISCLAIMER

Revision Summary: Revised October 12, 2015

The information in this SDS is believed to be current and accurate. No warranty, expressed or implied, of merchantability, fitness or otherwise is made. Any party using this product should review all federal, state, or local laws and regulations prior to use. S. W. Barrick & Sons is not responsible for the condition, performance, handling, storage, or disposal of the aggregate after the buyer takes title by pickup at the plant or delivery to the buyer's jobsite by S. W. Barrick & Sons.

EMISSION SUMMARY SHEET FOR CRITERIA POLLUTANTS

						Registration Number (Agency Use) G40-C				
	Potential Emissions (lbs/hr)					Potential Emissions (tons/yr)				
Source ID No.	NO_X	CO	VOC	SO_2	PM_{10}	NO_X	CO	VOC	SO_2	PM_{10}
Plant	-	-	-	-	0.99	-	-	-	-	1.89
Fugitive	-	-	-	-	1.58	-	-	-	-	3.04
Total										

EMISSION SUMMARY SHEET FOR HAZARDOUS/TOXIC POLLUTANTS

							Registration Number (Agency Use) G40-C					
	Potential Emissions (lbs/hr)						Potential Emissions (tons/yr)					
Source ID No.	Benzene	Ethyl-benzene	Toluene	Xylenes	n-Hexane	Formalde-hyde	Benzene	Ethyl-benzene	Toluene	Xylenes	n-Hexane	Formalde-hyde
Plant	-	-	-	-	-	-	-	-	-	-	-	-
Fugitive	-	-	-	-	-	-	-	-	-	-	-	-

EMISSION SUMMARY SHEET FOR HAZARDOUS/TOXIC POLLUTANTS

							Registration Number (Agency Use) G40-C					
	Potential Emissions (lbs/hr)						Potential Emissions (tons/yr)					
Source ID No.	Benzene	Ethyl-benzene	Toluene	Xylenes	n-Hexane	Formalde-hyde	Benzene	Ethyl-benzene	Toluene	Xylenes	n-Hexane	Formalde-hyde
Total												